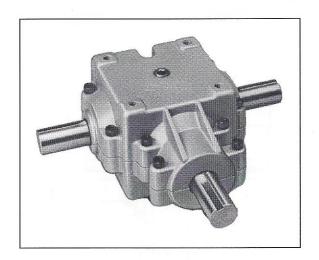
# Industrial 500 Series



Uses for the industrial model 500 include: Special industrial machinery, comveyors, packaging machinery, food products machinery, and many other industrial applications. Call Superior's experienced Sales and Engineering staff for help in selecting gear drives for any industrial application.



#### **RATING CHART**

RATIO	RPM										
	100		540		1	000	1750				
	HP	TORQUE	HP	TORQUE	HP	TORQUE	HP	TORQUE			
1 - 1	5.02	3165	22.65	2645	39.18	2470	64.54	2325			
1.35 - 1	4.69	2957	21.10	2464	36.53	2303	60.22	2170			
1 - 1.35	5.58	3518	25.17	2939	43.56	2746	71.76	2585			
1.5 - 1	3.15	1986	14.25	1664	24.68	1556	40.60	1463			
1 - 1.5	4.58	2888	20.67	2413	35.79	2256	58.99	2125			
2 - 1	3.09	1948	13.93	1626	24.16	1523	39.80	1434			

INCHES X 25.4 = MM

INPUT TORQUE measured in inch pounds.

NOTE: START-UP TORQUE - The use of PRECISION FORGED GEARS gives the Superior Gearbox extremely high stall or start-up torque capacity. Please see "WHY PRECISION FORGED GEARS" in the Engineering section of our Catalog.

### SERVICE FACTORS

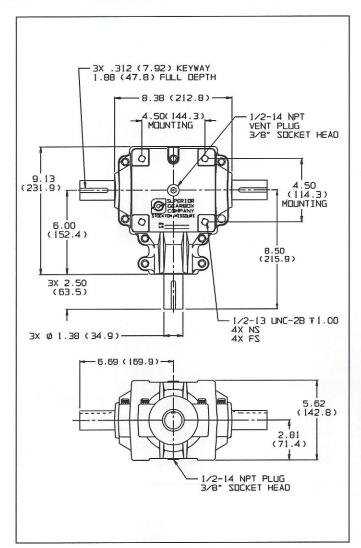
CHARACTER OF SHOCK DRIVEN MACHINE	CHARACTER OF POWER SOURCE SHOCK LOAD											
	ELECTRIC MOTOR UNIFORM				MULTI CYLINDER ENGINE LIGHT SHOCK				SINGLE CYLINDER ENGINE MEDIUM SHOCK			
	DURATION OF SERVICE (HOURS PER DAY)											
	.5	3	10	24	.5	3	10	24	.5	3	10	24
UNIFORM	0.60	0.80	1.00**	1.25	0.80	1.00	1.25	1.50	1.0	1.25	1.50	1.75
MODERATE	0.80	1.00	1.25	1.50	1.00	1.25	1.50	1.75	1.25	1.50	1.75	2.00
HEAVY	1.25	1.50	1.75	2.00	1.50	1.75	2.00	2.25	1.50	1.75	2.25	2.50

<sup>\*</sup>Divide the horse power rating by the service factor to obtain the design horsepower.
\*\*AGMA Class 1 Service

LIMITATIONS ON HORSEPOWER AND TORQUE RATINGS The horsepower and torque ratings given here are generalizations. The different conditions for various applications may result in higher or lower horsepower capacities. Under certain conditions the maximum indicated rpm may be exceeded. For these reasons the ratings can not be guaranteed for any application. Prototype testing should be conducted for each application before production.



## Industrial 500 Series



### **FEATURES**

Two piece aluminum housing for high strength, corrosion resistance, and thermal capacity. Precision machined for exact gear mesh and bearing preload. Precision Forged gears in the Model 500 are offered in several ratios starting with 1 - 1. 2-1 pinion gear and shaft are forged in one piece for increased strength. 1 3/8" diameter shafting standard. Tapered roller bearings are used exclusively and are computer sized to assure proper capacity. All Superior gearboxes are filled with proper amount of EP 80/90 gear lubricant and leak tested before shipment. Special lubricants can be supplied. The 500 series gearbox

weighs approximately 27 lbs. including 28 oz. of lubricant.

### SHAFT ARRANGEMENT AND ROTATION

